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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|---|--|--|--|--|
| | 09/981,015 | DISPENSA ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | SHARAD RAMPURIA | 2617 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on <u>01 A_B</u> 2a) This action is FINAL . 2b) This 3) Since this application is in condition for allowar | action is non-final. | secution as to the merits is | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 1-20 and 41-60 is/are pending in the a 4a) Of the above claim(s) is/are withdrav 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-20 and 41-60 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or | vn from consideration. | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the original transformation. The oath or declaration is objected to by the Examiner | epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj | e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d). | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) | 4) | ate | | | |
| Paper No(s)/Mail Date 6) U Other: | | | | | |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-20, 41-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Moura; Eduardo J. et al.** [US 6104727 A] in view of **Jonas; Amnon et al.** [US 6940833 B2].

As per claim 1, Moura teaches:

A method of operating a probe device in a broadband wireless system (Abstract), the method comprising:

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storing the channel information in a memory in the probe device; and transferring the channel information from the memory to a user system. (e.g. storing; Col.6; 32-58)

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Moura doesn't teach specifically, receiving a message; processing the message to determine channel information describing actual use of each of a plurality of channels in the broadband wireless system by each of a plurality of users, wherein the channel information describing actual use includes a per-user breakdown of a time spent in each channel. However, JONAS advocates in an analogous art, that receiving a message; processing the message to determine channel information describing actual use of each of a plurality of channels in the broadband wireless system by each of a plurality of users, (E.G. describing use of each of a plurality of channels in the broadband by each of a plurality of users; Col.9; 6-39, Col.10; 4-17) wherein the channel information describing actual use includes a per-user breakdown of a time spent in each channel. (E.G. Modems are calibrated via a calibration message constructed at the hub by measuring some parameters of communication bursts between the modem to the hub. The modems rotate in using the available upstream channels so that each available channel is fully calibrated using actual communication bursts, keeping the parameters for each channel ready for use when assigned for communicating on any of the available channels; Col.9; 6-39, Col.10; 4-17) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Moura including receiving a message; processing the message to determine channel information describing actual use of each of a plurality of channels in the broadband wireless system by each of a plurality of users, wherein the channel information describing actual use includes a per-user breakdown of a time spent in each channel in order to provide a

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method of two dimensional scheduler integrates the allocation of both the time domain and the channel domain for upstream communication in a broadband wireless access system.

As per claim 2, Moura teaches:

The method of claim 1 wherein the channels are upstream. (e.g. upstream; Col.14; 55-Col.15; 16)

As per claim 3, Moura teaches:

The method of claim 1 wherein the channels are downstream. (e.g. downstream; Col.14; 55-Col.15; 16)

As per claim 4, **Moura** teaches:

The method of claim 1 wherein the message is a credit that allows usage of one of the channels. (e.g. credit; Col.14; 55-Col.15; 16)

As per claim 5, Moura teaches:

The method of claim 1 wherein the message indicates a completion of usage of one of the channels. (e.g. completion; Col.13; 11-24)

As per claim 6, Moura teaches:

The method of claim 1 wherein the probe device is connected to a switch in the broadband wireless system. (e.g. switch; Col.5; 40-54)

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As per claim 7, Moura teaches:

The method of claim 1 wherein the probe device is connected to an upstream manager in the broadband wireless system. (e.g.; Col.13; 11-24)

As per claim 8, Moura teaches:

The method of claim 1 wherein the probe device is connected to a downstream manager in the broadband wireless system. (e.g. downstream; Col.14; 55-Col.15; 16)

As per claim 9, Moura teaches:

The method of claim 1 wherein processing the message comprises determining a state of one of the channels. (e.g. state of channels; Col.14; 55-Col.15; 16)

As per claim 10, Moura teaches:

The method of claim 9 wherein the state is polling. (e.g. polling; Col.14; 55-Col.15; 16)

As per claim 11, Moura teaches:

The method of claim 9 wherein the state is dedicated. (e.g. dedicated; Col.15; 47-60)

As per claim 12, **Moura** teaches:

The method of claim 9 wherein the state is idle. (e.g. idle; Col.8; 37-43)

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64)

As per claim 13, Moura teaches:

The method of claim 9 further comprising determining a time in the state. (e.g. time; Col.10; 56-

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As per claim 14, Moura teaches:

The method of claim 1 wherein processing the message comprises monitoring a number of bytes transmitted. (e.g. bytes transmitted; Col.2; 13-34)

As per claim 15, Moura teaches:

The method of claim 1 wherein processing the message comprises monitoring a number of messages transmitted during a state of one of the channels. (e.g. transmitted; Col.14; 55-Col.15; 16)

As per claim 16, Moura teaches:

The method of claim 1 wherein the channel information comprises a state of one of the channels. (e.g. state of channels; Col.14; 55-Col.15; 16)

As per claim 17, Moura teaches:

The method of claim 1 wherein the channel information comprises a change in a state of one of the channels. (e.g. state of channels; Col.14; 55-Col.15; 16)

As per claim 18, Moura teaches:

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The method of claim 1 wherein the channel information comprises a number of bytes transmitted. (e.g. bytes transmitted; Col.2; 13-34)

As per claim 19, Moura teaches:

The method of claim 1 wherein the channel information comprises a number of messages transmitted. (e.g. transmitted; Col.14; 55-Col.15; 16)

As per claim 20, Moura teaches:

The method of claim 1 wherein the channel information comprises a time in a state of one of the channels. (e.g. state of channels; Col.14; 55-Col.15; 16)

Claims 41-60 are the device claims, corresponding to method claims 1-20 respectively, and rejected under the same rational set forth in connection with the rejection of claims 1-20 respectively, above.

Response to Remarks

Applicant's arguments with respect to claims 1-20, 41-60, have been fully considered but are most in view of the new ground(s) of rejection.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on M-F. (8:30-5 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sharad Rampuria/ Primary Examiner Art Unit 2617